

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/EP 02/03788

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 F41A19/21

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F41A

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 545 143 A (SCHULTZ MITCHELL D) 8 October 1985 (1985-10-08) abstract; figures	1-14
A	US 4 403 436 A (JENNIE FRED) 13 September 1983 (1983-09-13) abstract; figures	1-14
A	US 3 193 961 A (DOMENICO LINARCLLO) 13 July 1965 (1965-07-13) abstract; figures	1-14
A	EP 0 277 922 A (BERETTA ARMI SPA) 10 August 1988 (1988-08-10) abstract; figures	1-14



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

Z document member of the same patent family

Date of the actual completion of the international search

5 August 2002

Date of mailing of the international search report

20/08/2002

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4545143	A	08-10-1985	NONE	
US 4403436	A	13-09-1983	JP 1870133 C JP 5077960 B JP 58043399 A	06-09-1994 27-10-1993 14-03-1983
US 3193961	A	13-07-1965	NONE	
EP 0277922	A	10-08-1988	IT 1207769 B AT 69873 T DE 3866369 D1 EP 0277922 A2 ES 2029074 T3 GR 3003225 T3 JP 2694273 B2 JP 63201500 A US 4811509 A	01-06-1989 15-12-1991 09-01-1992 10-08-1988 16-07-1992 17-02-1993 24-12-1997 19-08-1988 14-03-1989